


Hello, I'm Ben Zhao

University of Waterloo
Computer Science, Co-op (4A)

 wenbinzhao

 wenbinzhao.com

 ben@wenbinzhao.com

 639-997-ZHAO(9426)

Experience

Arctic Wolf Networks—Software Engineer

September 2019 - December 2019

- Developed linux version of multi-platform agent in Go which monitors and audits computer activity.
- Used Docker and Make to automate build and package processes.
- Agent enforces persistent firewall rules to selectively block ports and networks.
- Developed, debugged, and deployed code for distributed computing clusters with shared resources.
- Updated servers to handle caching, parsing, audit processing, and managing device quarantines

Capital One—Software Engineer

January 2019 - April 2019

- Constructed a Java library to abstract graph algorithms for Amazon Neptune graph database.
- Invented patent-pending architecture for data storage and aggregation used in modelling and fraud detection.
- Applied machine-learning to model customer behaviour using Python and SciKit-Learn to determine feasibility of new features.
- Aggregated millions of data entries to engineer properties that feeds into models.

Imagine Communications—Full Stack Developer

September 2017 - December 2017

- Refactored code to be asynchronous using JavaScript promises.
- Increased UI responsiveness by bypassing unnecessary server calls and handling simple calculations client-side.
- Developed reusable Angular components to accelerate UI development and enforce a uniform style.
- Automated stylesheet generation using node.JS to enable exporting icon sets as reusable NPM packages.
- Optimized C# back-end services by reducing size of necessary data.

Acronym Software—C++ Developer

May 2018 - August 2018

- Added a new classification of calculations for civil engineering and design.
- Optimized data structures to store and efficiently handle critical data for new calculations.
- Increased code readability of existing code by reorganizing code to be more modular and reusable.

Projects

Neural Evolution Of Feed-Forward Neural Networks

June 2019

- Paper investigating neural evolution networks.
- Researched existing techniques used in structurally evolving neural networks.
- Investigated capacity for such algorithms to learn strategies and learn in real-time.
- Tested different algorithms on a simple task to observe how structures evolve.

Big Brain

October 2019

- Used Tensor-Flow to develop a recurrent neural network to generate fake spam emails.
- Created proof of concept for AI generated text.
- Additionally, trained AI on tweets to create a tweet generator.

Fun

Dancing, climbing, swimming, dungeons and dragons, and boardgames.